

**PATENT**  
Attorney Docket No. 401612/ASAHINA

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

AKIYOSHI et al.

Application No. Unassigned

Filed: March 21, 2002

For: WIRE ELECTRODE FOR WIRE  
ELECTRICAL DISCHARGE  
MACHINE

Art Unit: Unassigned

Examiner: Unassigned

**PENDING CLAIMS AFTER ENTRY OF PRELIMINARY AMENDMENT**

1. A wire electrode for wire electrical discharge machining including a three-layer structure comprising an electrically conductive core, a first coating of Cu-Zn intermetallic compound in other than an  $\alpha$  phase surrounding the core, and a second coating of Cu-Zn alloy in the  $\alpha$  phase on the first coating, wherein the second coating has a thickness in a range from 5 to 15  $\mu\text{m}$ .

2. The wire electrode for wire electrical discharge machining according to Claim 1, wherein the first coating comprises Cu-Zn alloy in a  $\beta$  phase.

3. The wire electrode for wire electrical discharge machining according to Claim 1, wherein the core comprises Cu-Zr alloy.

4. The wire electrode for wire electrical discharge machining according to Claim 2, wherein the core comprises Cu-Zr alloy.

5. The wire electrode for wire electrical discharge machining according to Claim 1, wherein the core comprises Cu-Zn alloy.

6. The wire electrode for wire electrical discharge machining according to Claim 2, wherein the core comprises Cu-Zn alloy.